

**AMENDMENTS TO THE CLAIMS**

**Claims**

We claim:

1. (Currently Amended) A method of monitoring a manufacturing sub-process, the method comprising the steps of:
  - a) providing a KPI platform with a SPC subsystem;
  - b) collecting and storing at least one piece of data ~~on~~ in at least one single database through at least one data collecting apparatus;
  - c) setting at least one range of specifications for the at least one piece of data on the KPI platformdashboard;
  - d) accessing the single database with the KPI platformdashboard; and
  - e) notifying at least one user through the SPC subsystem in real time when the at least one sample piece of data falls outside the at least one range of specifications.
2. (New) The method of claim 1, wherein the collecting and storing at least one piece of data step comprises automatically collecting and storing a first piece of data in the at least one database and manually collecting and storing a second piece of data in the same at least one database.
3. (New) The method of claim 1, further comprising the step of storing at least one piece of product identifying data and at least one piece of manufacturing plant specific data together in the at least one database.
4. (New) The method of claim 1, further comprising the step of allowing the user to select at least one manufacturing sub-process through the KPI dashboard.

5. (New) The method of claim 3, wherein the collecting and storing at least one piece of data step collects and stores at least one measure specific to the at least one selected manufacturing sub-process.
6. (New) The method of claim 4, wherein the setting at least one range of specifications step comprises setting at least one range of specifications for the at least one measure.
7. (New) The method of claim 5, further comprising the step of setting at least one alarm within the range of specifications for the selected manufacturing sub-process.
8. (New) The method of claim 6, further comprising the step of notifying the user in real time when the at least one collected measure triggers the alarm.
9. (New) The method of claim 8, further comprising the step of entering into the at least one database a reason for the collected measure triggering the alarm.
10. (New) The method of claim 9, further comprising the step of entering a corrective action in the at least one database that was taken to prevent the at least one measure from triggering the alarm again.
11. (New) The method of claim 1, further comprising the step of generating at least one report based on the at least one piece of data stored in the at least one database.
12. (New) A method of monitoring at least one manufacturing process for at least one manufacturing plant, the method comprising the steps of:
  - a) entering at least one piece of product identifying data for at least one product into a first data entry field;
  - b) entering at least one piece of manufacturing plant specific data into a second data entry field;

- c) assigning at least one data collecting apparatus to at least one manufacturing sub-process that produces the at least one product;
- d) collecting at least one piece of process data with the at least one collecting data apparatus; and
- e) storing the product identifying data, the plant specific data and the process data together in at least one database.

13. (New) The method of claim 12, further comprising the step of manually collecting at least one piece of product data from the at least one product and entering the data in the same at least one database that stores the product identifying data, the plant specific data and the process data.

14. (New) The method of claim 12, further comprising the step of setting at least one range of specifications for the at least one piece of process data.

15. (New) The method of claim 14, further comprising the step of notifying the user in real time when the at least one piece of process data falls outside the at least one range of specifications.

16. (New) The method of claim 14, further comprising the step of setting an alarm within the at least one range of specifications.

17. (New) The method of claim 16, further comprising the step of notifying the user in real time when the at least one piece of process data triggers the alarm.

18. (New) The method of claim 13, further comprising the step of generating at least one report from the at least one piece of product identifying data, the at least one piece of plant specific

data, the at least one piece of process data, and the at least one piece of product data stored in the same at least one database.

19. (New) The method of claim 12, further comprising the step of allowing at least one user to access the at least one database in order to track the at least one product through each step of the at least one manufacturing sub-process.
20. (New) A method of allowing a user to directly access a plant management database and configure and manipulate the data stored therein, the method comprising:
  - a) providing at least one piece of manufacturing equipment capable of producing at least one product;
  - b) collecting automatically at least one piece of process data from the at least one piece of manufacturing equipment;
  - c) entering manually at least one piece of product data for the at least one product produced from the manufacturing equipment; and
  - d) storing the at least one piece of process data and at least one piece of product data together in the same at least one database.
21. (New) The method of claim 20, further comprising the step of setting at least one range of specifications for the at least one piece of process data.
22. (New) The method of claim 21, further comprising the step of notifying the user in real time when the at least one piece of process data falls outside the at least one range of specifications.
23. (New) The method of claim 21, further comprising the step of setting an alarm within the at least one range of specifications.

24. (New) The method of claim 23, further comprising the step of notifying the user in real time when the at least one piece of process data triggers the alarm.

25. (New) The method of claim 20, further comprising the step of generating at least one report based on the process data and product data stored in the at least one database.

26. (New) A plant management system comprising:

- a) at least one piece of manufacturing equipment;
- b) a means for gathering at least one piece of process data from the manufacturing equipment;
- c) a means for storing the at least one piece of process data in at least one database;
- d) a means for manually entering at least one piece of product data into the same at least one database; and
- e) a means for allowing a user to access the product and process data to generate at least one report.

27. (New) The plant management system of claim 26, further comprising a means for setting a range of specifications for the process data and product data.

28. (New) The plant management system of claim 27, further comprising a means for notifying the user in real time when the process data and product data fall outside the range of specifications.